

541415

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

Recd PCT/PTO 01 JUL 2005

(19) World Intellectual Property Organization  
International Bureau



10541415



(43) International Publication Date  
29 July 2004 (29.07.2004)

PCT

(10) International Publication Number  
WO 2004/063672 A1

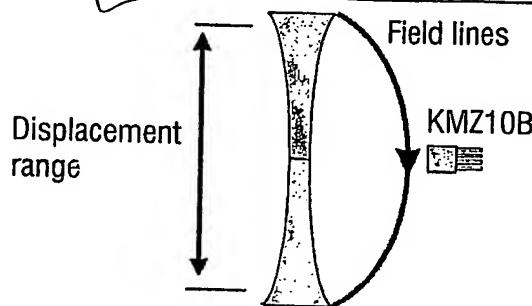
- (51) International Patent Classification<sup>7</sup>: G01D 5/16 (74) Agent: MEYER, Michael; Philips Intellectual Property & Standards GmbH, Weiss hausstr. 2, 52066 Aachen (DE).
- (21) International Application Number: PCT/IB2003/006269
- (22) International Filing Date: 15 December 2003 (15.12.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 03100018.5 8 January 2003 (08.01.2003) EP
- (71) Applicant (for DE only): PHILIPS INTELLECTUAL PROPERTY & STANDARDS GMBH [DE/DE]; Stein-damm 94, 20099 Hamburg (DE).
- (71) Applicant (for all designated States except DE, US): KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): BUTZMANN, Stefan [DE/DE]; c/o Philips Intellectual Property & Standards GmbH, Weiss hausstr. 2, 52066 Aachen (DE).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ARRANGEMENT FOR DETERMINING POSITION



(57) Abstract: A description is given of an arrangement for determining the position of a magnetic-field-sensitive sensor unit in the magnetic field of a magnet arrangement having an at least substantially bar-shaped contour along an at least substantially rectilinear motion coordinate that extends parallel to a longitudinal axis of the at least substantially bar-shaped contour, in which the magnetic-field-sensitive sensor unit is intended to measure a component of the magnetic field which extends in a plane that is at least substantially parallel to the longitudinal axis of the at least substantially bar-shaped contour in a manner at least substantially perpendicular to this longitudinal axis, and the magnet arrangement has a magnetic north pole in the region of a first end of the at least substantially bar-shaped contour, a magnetic south pole in the region of a second end of the at least substantially bar-shaped contour, and a narrowing of the at least substantially bar-shaped contour in the central region extending between the north pole and the south pole. Better use can thereby be made of the dimension of the magnet arrangement than for a range that can be used for position measurement.

WO 2004/063672 A1